

Please amend claims 1-12 as follows:

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1. A method for cutting an associated ply stock along a cut line using a cutting apparatus comprising a knife assembly, means for moving said knife assembly normally toward and away from said ply stock, and means for traversing said knife assembly between a first lateral edge and a second lateral edge of said ply stock, said knife assembly including a blade having a cutting portion including a leading point, a leading edge and a trailing edge, said trailing edge having an associated length (L), said ply stock having spaced first and second lateral edges, the method comprising the steps of:
    - a. moving said knife assembly toward said ply stock to insert the leading point of said knife blade into said ply stock at an insertion point spaced a distance (D) from said first lateral edge wherein distance (D) is less than or equal to said length (L) in order to back-cut said ply stock from said insertion point to said first lateral edge with said trailing edge of said blade; and,
    - b. traversing said knife assembly across said ply stock toward said second lateral edge in order to cut said ply stock from said insertion point to said second lateral edge with said leading edge of said blade and provide severance of said ply stock from said first lateral edge to said second lateral edge.
  2. The method of claim 1 wherein the cutting apparatus further includes an anvil having a slot in a support surface, said slot being generally aligned with the cut line, the method further comprising the steps of:
    - a. inserting said leading point of said knife blade into said slot in said anvil after inserting said leading point into said ply stock; and,
    - b. maintaining said leading point within said slot while said knife assembly traverses said ply stock.
  3. The method of claim 1 wherein said cutting apparatus further includes means for heating said knife blade, the method further comprising the step of:  
heating said knife blade before inserting said leading edge into said ply stock.

4. The method of claim 3 further comprising the step of:  
maintaining said heating means near said first lateral edge of said ply stock during the traversing of said knife assembly.
5. The method of claim 1 wherein said leading edge of said knife blade includes a concave cutting portion, the method further comprising:  
engaging said concave cutting portion of said leading edge with said ply stock after inserting said leading point into said ply stock.
6. A knife assembly for use in a cutting apparatus for cutting an associated ply stock along a cut line of an anvil, said knife assembly including a blade having a cutting portion including a leading point, a leading edge and a trailing edge, said knife assembly comprising:
- a. said leading edge of said blade including a concave portion adjacent said leading point for urging said ply stock towards said anvil; and,
  - b. said trailing edge of said blade having a generally linear profile.
7. The knife assembly of claim 6 wherein said knife assembly further comprises:  
said leading edge of said blade including a convex portion, said convex portion meeting said concave portion at an inflection point.
8. The knife assembly of claim 6 wherein said knife assembly further comprises:  
said trailing edge being inclined at an angle  $\alpha$  from 20 to 40 degrees to the plane (S-S) of the associated ply stock at the cut line.
9. A cutting apparatus for cutting an associated ply stock along a cut line between first and second lateral edges, said apparatus comprising a knife assembly, means for moving said knife assembly toward and away from said ply stock, and means for traversing said knife assembly between said first and second lateral edges of said ply stock, said knife assembly including a

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blade having a cutting portion including a leading point, a leading edge and a trailing edge, said trailing edge having an associated length (L), said cutting apparatus comprising:

said knife assembly having a home position wherein said leading point of said blade is directly above an insertion point of said associated ply stock and wherein a distance (D) between said first lateral edge of said associated ply stock and said insertion point is less than or equal to said associated length (L) of said trailing edge.

10. The cutting apparatus of claim 9 further comprising:  
an anvil positioned below said knife assembly and having a slot in a support surface, said slot being generally aligned with said cut line.
11. The cutting apparatus of claim 9 further comprising:  
means for heating said knife blade.
12. A method of cutting a sheet of material from a first lateral edge to an opposite second lateral edge with a knife blade comprising:
- plunging said knife blade through said sheet at a first position spaced from said first edge,
  - continuing to plunge said knife blade through said sheet to cut said sheet from said first position to said first edge; and,
  - moving said knife blade from said first position to said second edge to complete the cutting of said sheet from said one edge to said opposite edge.